

Appendix F2

TEM Data for Test-2 Day-17 Solution Samples

List of Figures

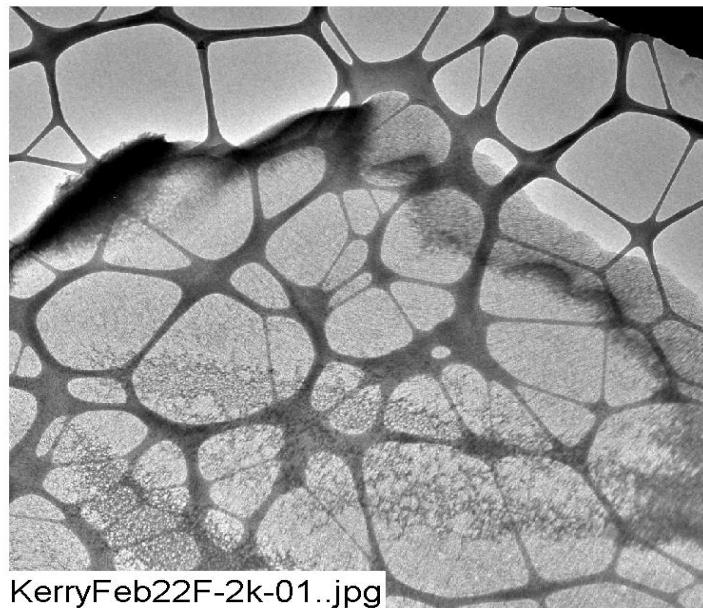
Figure F2-1. Electron micrograph magnified 2,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-2k-01).....	F2-2
Figure F2-2. Electron micrograph magnified 2,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-2k-02).....	F2-2
Figure F2-3. Electron micrograph magnified 2,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-2k-03).....	F2-3
Figure F2-4. Electron micrograph magnified 2,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-2k-04).....	F2-3
Figure F2-5. Electron micrograph magnified 2,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-2k-05).....	F2-4
Figure F2-6. Electron micrograph magnified 4,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-4k-01).....	F2-4
Figure F2-7. Electron micrograph magnified 4,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-4k-02).....	F2-5
Figure F2-8. Electron micrograph magnified 4,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-4k-03).....	F2-5
Figure F2-9. Electron micrograph magnified 4,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-4k-04).....	F2-6
Figure F2-10. Electron micrograph magnified 4,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-4k-05).....	F2-6
Figure F2-11. Electron micrograph magnified 10,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-10k-01).....	F2-7
Figure F2-12. Electron micrograph magnified 10,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-10k-02).....	F2-7
Figure F2-13. Electron micrograph magnified 10,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-10k-03).....	F2-8
Figure F2-14. Electron micrograph magnified 10,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-10k-04).....	F2-8

Figure F2-15. Electron micrograph magnified 10,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-10k-05).....	F2-9
Figure F2-16. TEM image for one Test-2 Day-17 filtered sample solution location (KerryFeb22F-30cm(bin)-01).	F2-9
Figure F2-17. TEM image for a second Test-2 Day-17 filtered sample solution location (KerryFeb22F-30cm(bin)-02).	F2-10
Figure F2-18. TEM image for a third Test-2 Day-17 filtered sample solution location (KerryFeb22F-30cm(bin)-03).	F2-10
Figure F2-19. Electron micrograph magnified 50,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-50k-01).....	F2-11
Figure F2-20. Electron micrograph magnified 50,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-50k-02).....	F2-11
Figure F2-21. Electron micrograph magnified 50,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-50k-03).....	F2-12
Figure F2-22. Electron micrograph magnified 50,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-50k-04).....	F2-12
Figure F2-23. Electron micrograph magnified 50,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-50k-05).....	F2-13
Figure F2-24. Electron micrograph magnified 2,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-01).....	F2-13
Figure F2-25. Electron micrograph magnified 2,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-02).....	F2-14
Figure F2-26. Electron micrograph magnified 2,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-03).....	F2-14
Figure F2-27. Electron micrograph magnified 2,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-04).....	F2-15
Figure F2-28. Electron micrograph magnified 4,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-01).....	F2-15
Figure F2-29. Electron micrograph magnified 4,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-02).....	F2-16
Figure F2-30. Electron micrograph magnified 4,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-03).....	F2-16
Figure F2-31. Electron micrograph magnified 4,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-04).....	F2-17

Figure F2-32. Electron micrograph magnified 10,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-01).....	F2-17
Figure F2-33. Electron micrograph magnified 10,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-02).....	F2-18
Figure F2-34. Electron micrograph magnified 10,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-03).....	F2-18
Figure F2-35. Electron micrograph magnified 10,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-04).....	F2-19
Figure F2-36. TEM image for one Test-2 Day-17 unfiltered sample solution location (KerryFeb22UF-30cm(bin)-01).....	F2-19
Figure F2-37. TEM image for a second Test-2 Day-17 unfiltered sample solution location (KerryFeb22UF-30cm(bin)-02).....	F2-20
Figure F2-38. TEM image for a third Test-2 Day-17 unfiltered sample solution location (KerryFeb22UF-30cm(bin)-03).....	F2-20
Figure F2-39. Electron micrograph magnified 50,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-01).....	F2-21
Figure F2-40. Electron micrograph magnified 50,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-02).....	F2-21
Figure F2-41. Electron micrograph magnified 50,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-03).....	F2-22
Figure F2-42. Electron micrograph magnified 50,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-04).....	F2-22

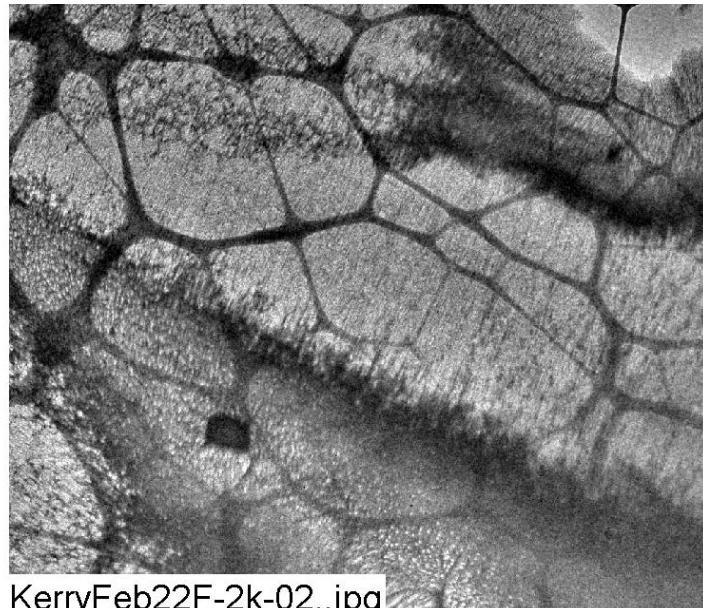
This page is intentionally blank.

This appendix presents TEM images and diffraction patterns for Test-2 Day-17 (February 22, 2005) filtered and unfiltered solution samples. The filtered sample was obtained by passing solution through a 0.7- μm fiberglass filter at 60°C. The unfiltered solution samples were extracted from the tank directly. A drop of each solution sample was placed onto a copper grid of 200 mesh. After being dried in air at room temperature, the sample was ready for TEM analysis. The TEM results and diffraction patterns were obtained on February 22, 2005. Diffraction patterns show whether the sample was amorphous or crystalline. When a sample gives clear and significant diffraction patterns, it is crystalline. Otherwise, it is amorphous. The results show that all of the Test-2 Day-17 samples were amorphous.



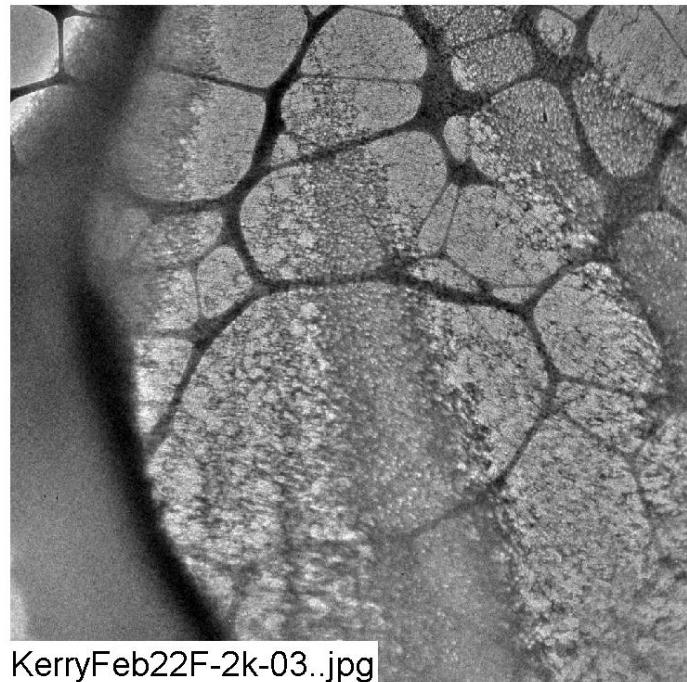
KerryFeb22F-2k-01.jpg

Figure F2-1. Electron micrograph magnified 2,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-2k-01).



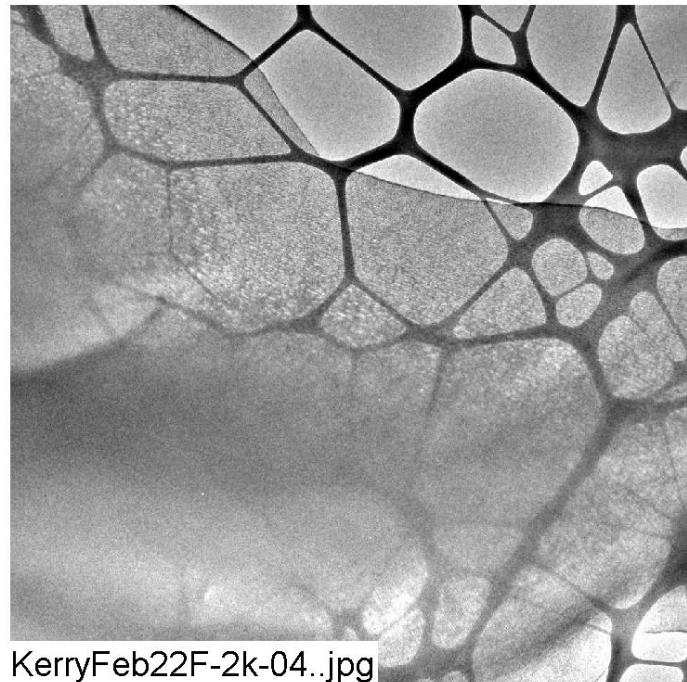
KerryFeb22F-2k-02.jpg

Figure F2-2. Electron micrograph magnified 2,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-2k-02).



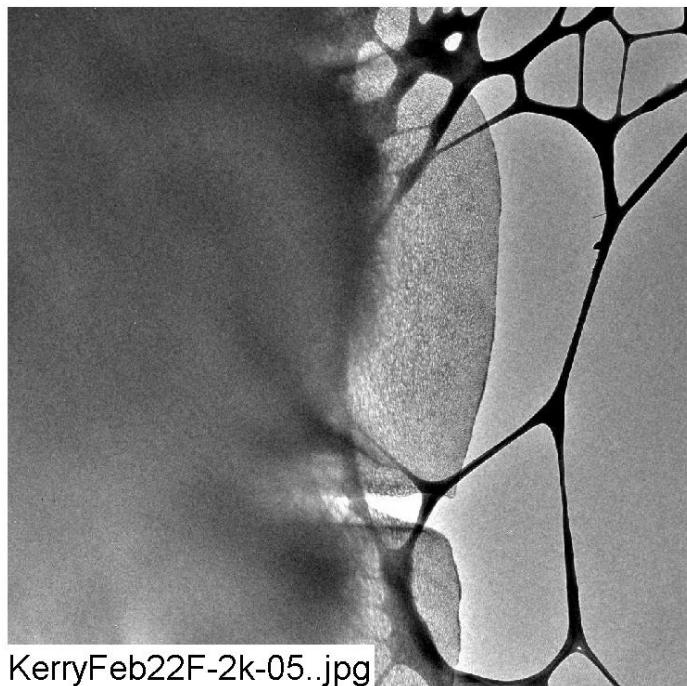
KerryFeb22F-2k-03..jpg

Figure F2-3. Electron micrograph magnified 2,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-2k-03).



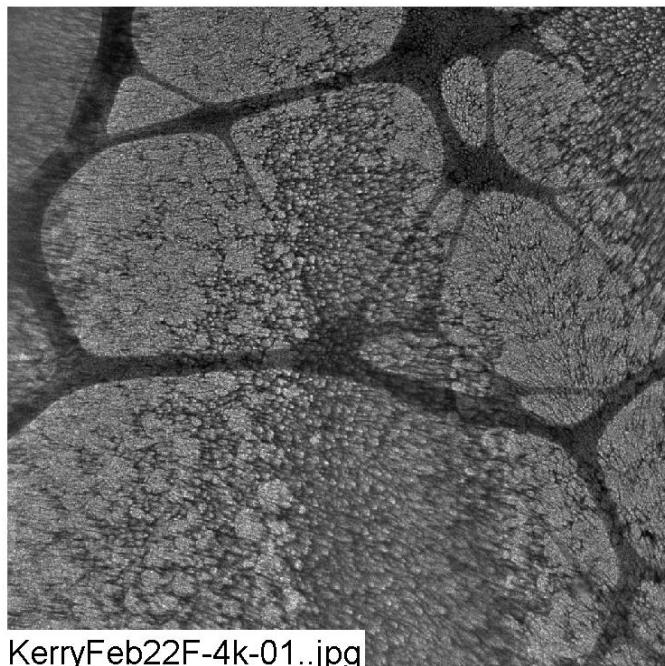
KerryFeb22F-2k-04..jpg

Figure F2-4. Electron micrograph magnified 2,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-2k-04).



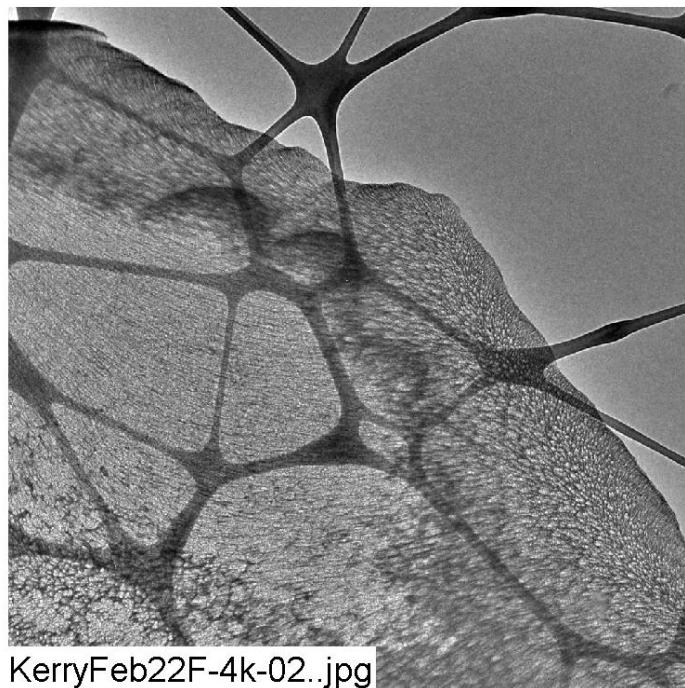
KerryFeb22F-2k-05.jpg

Figure F2-5. Electron micrograph magnified 2,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-2k-05).



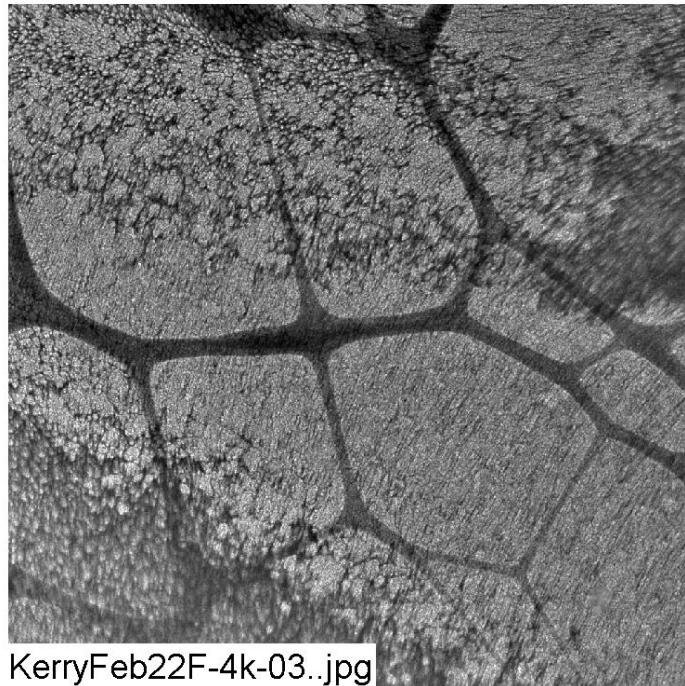
KerryFeb22F-4k-01.jpg

Figure F2-6. Electron micrograph magnified 4,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-4k-01).



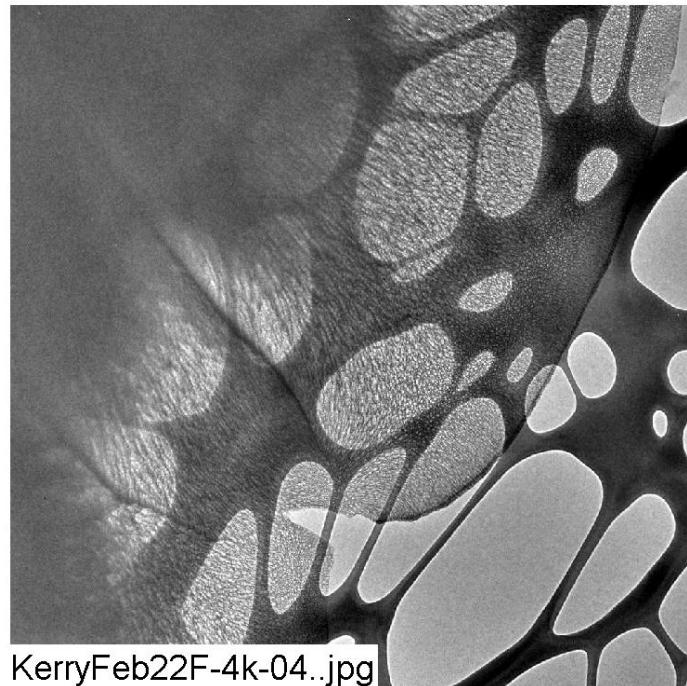
KerryFeb22F-4k-02.jpg

Figure F2-7. Electron micrograph magnified 4,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-4k-02).



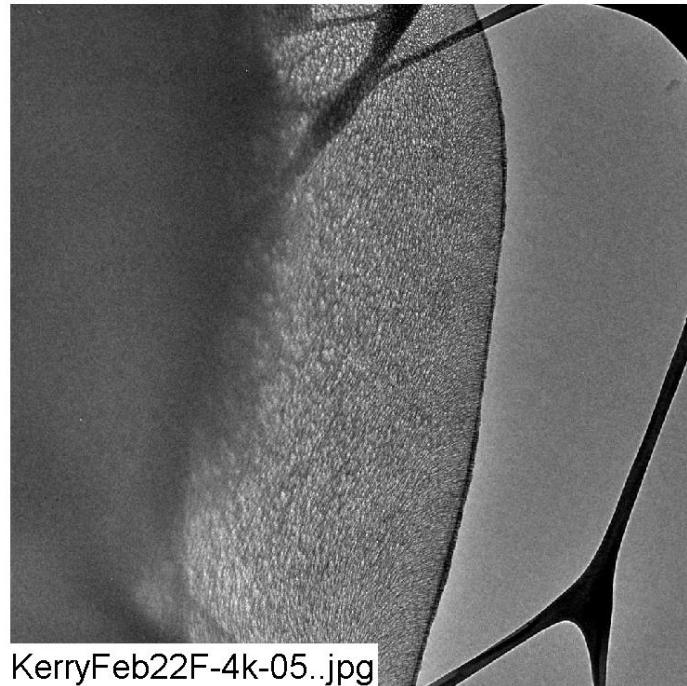
KerryFeb22F-4k-03.jpg

Figure F2-8. Electron micrograph magnified 4,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-4k-03).



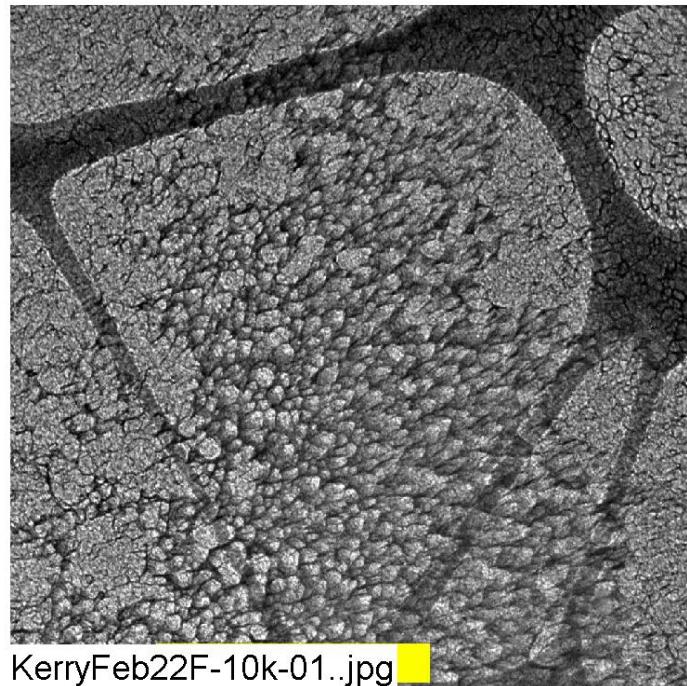
KerryFeb22F-4k-04.jpg

Figure F2-9. Electron micrograph magnified 4,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-4k-04).



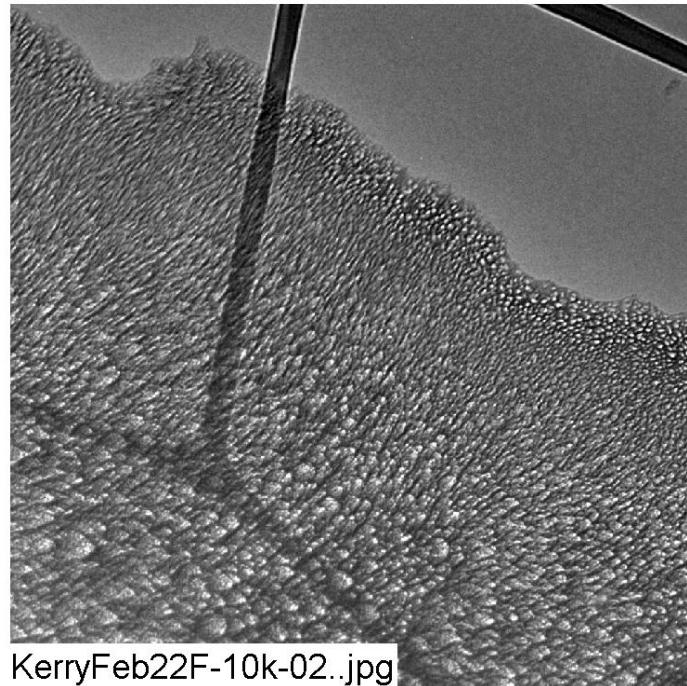
KerryFeb22F-4k-05.jpg

Figure F2-10. Electron micrograph magnified 4,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-4k-05).



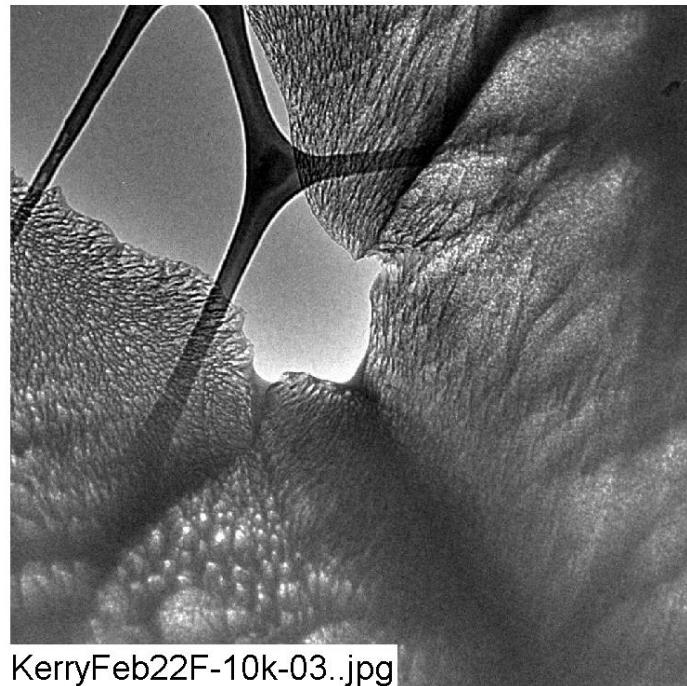
KerryFeb22F-10k-01..jpg

Figure F2-11. Electron micrograph magnified 10,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-10k-01).



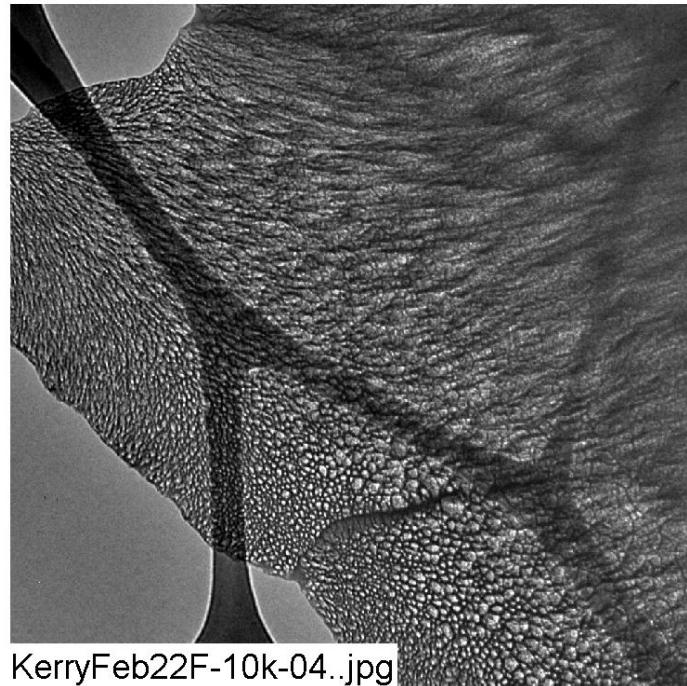
KerryFeb22F-10k-02..jpg

Figure F2-12. Electron micrograph magnified 10,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-10k-02).



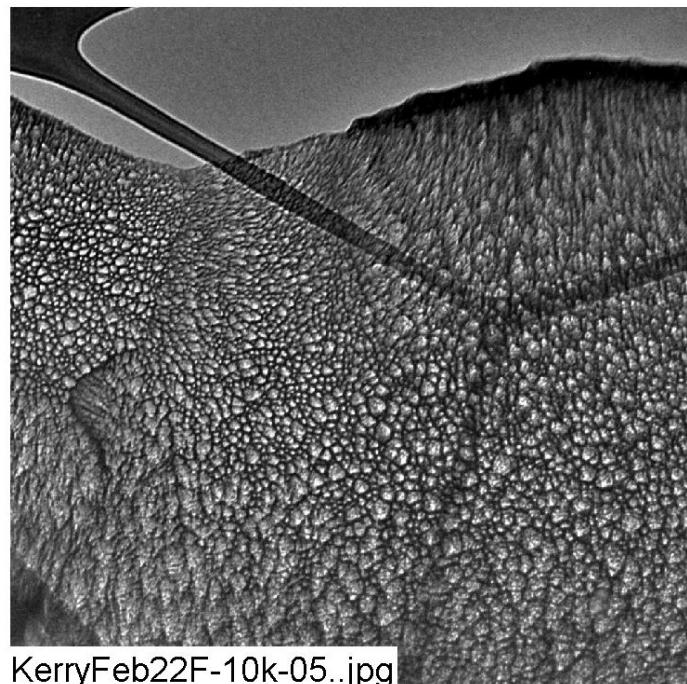
KerryFeb22F-10k-03..jpg

Figure F2-13. Electron micrograph magnified 10,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-10k-03).



KerryFeb22F-10k-04..jpg

Figure F2-14. Electron micrograph magnified 10,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-10k-04).



KerryFeb22F-10k-05.jpg

Figure F2-15. Electron micrograph magnified 10,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-10k-05).

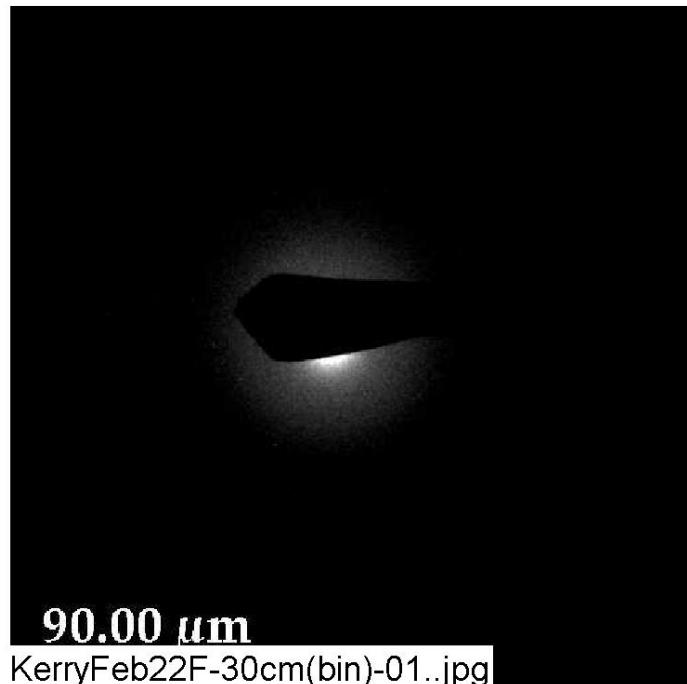


Figure F2-16. TEM image for one Test-2 Day-17 filtered sample solution location (KerryFeb22F-30cm(bin)-01).

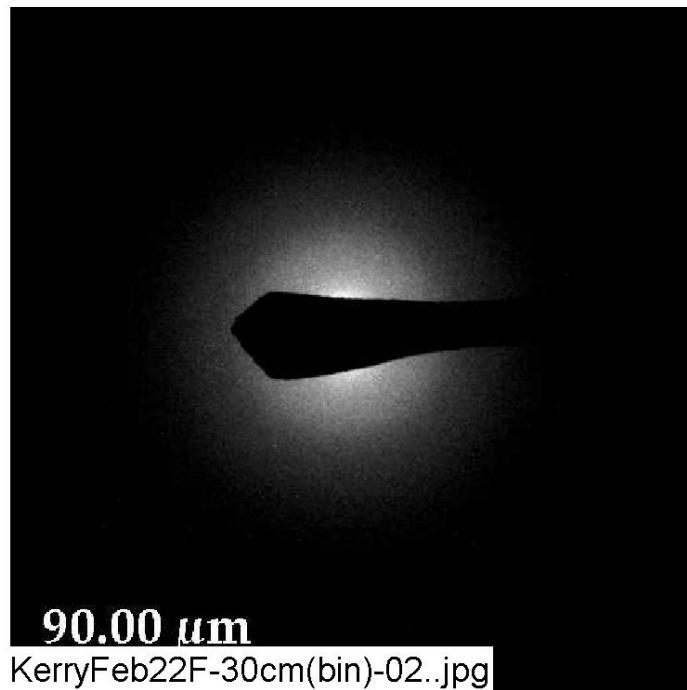


Figure F2-17. TEM image for a second Test-2 Day-17 filtered sample solution location (KerryFeb22F-30cm(bin)-02).

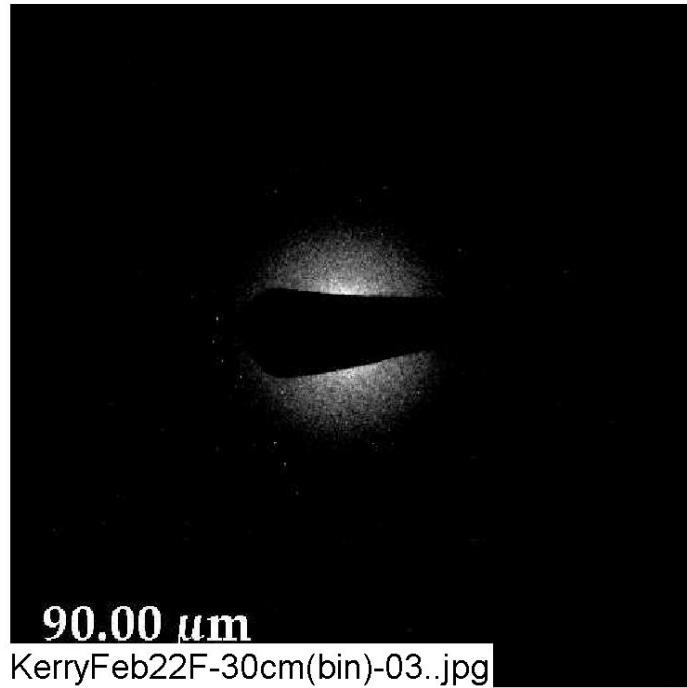


Figure F2-18. TEM image for a third Test-2 Day-17 filtered sample solution location (KerryFeb22F-30cm(bin)-03).

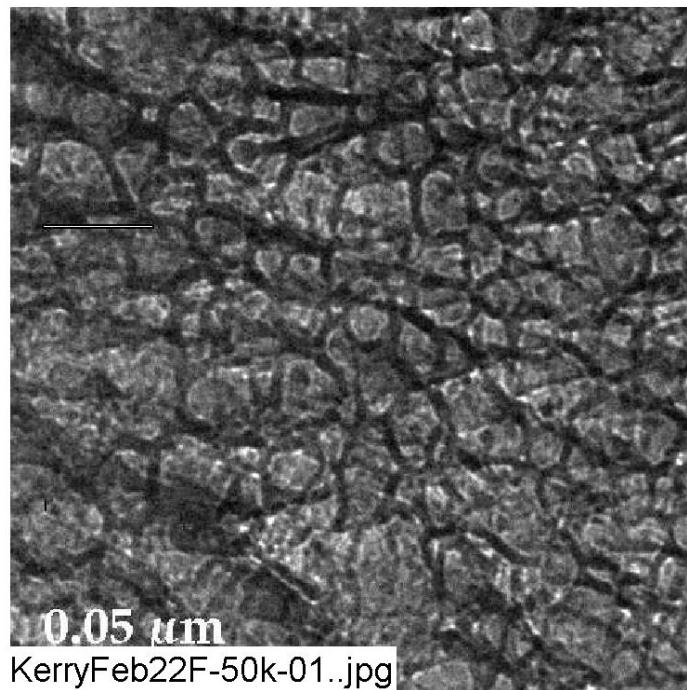


Figure F2-19. Electron micrograph magnified 50,000 times for one Test-2 Day-17 filtered sample location (KerryFeb22F-50k-01).

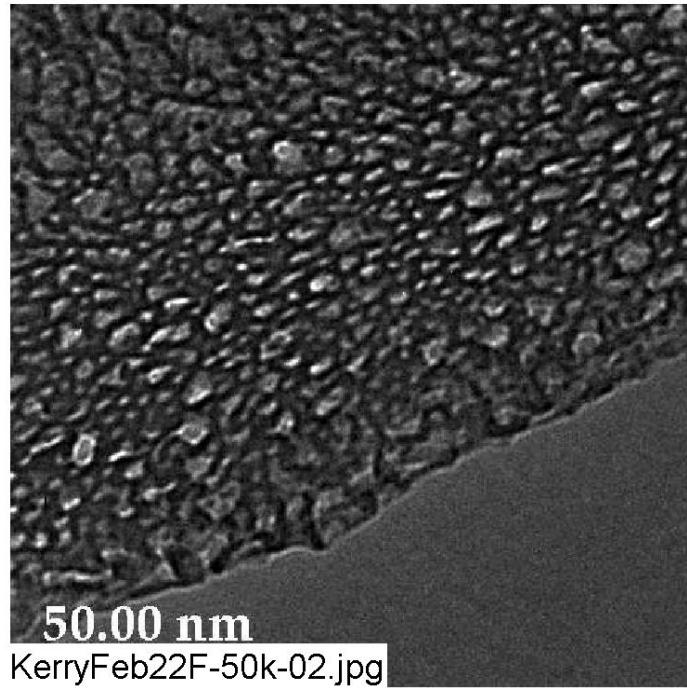


Figure F2-20. Electron micrograph magnified 50,000 times for a second Test-2 Day-17 filtered sample location (KerryFeb22F-50k-02).

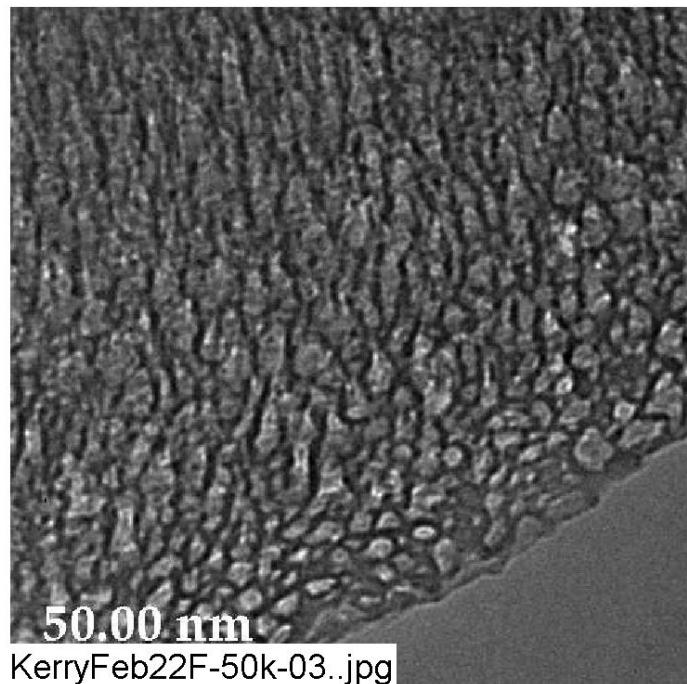


Figure F2-21. Electron micrograph magnified 50,000 times for a third Test-2 Day-17 filtered sample location (KerryFeb22F-50k-03).

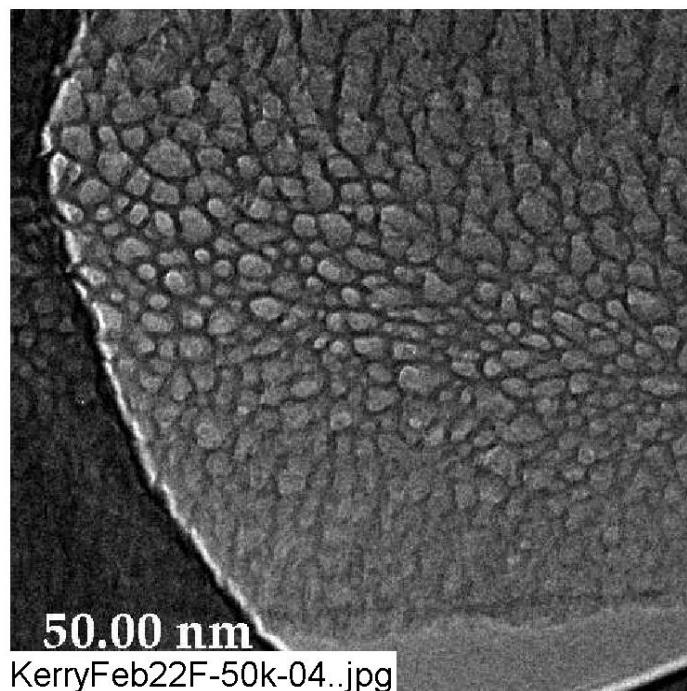


Figure F2-22. Electron micrograph magnified 50,000 times for a fourth Test-2 Day-17 filtered sample location (KerryFeb22F-50k-04).

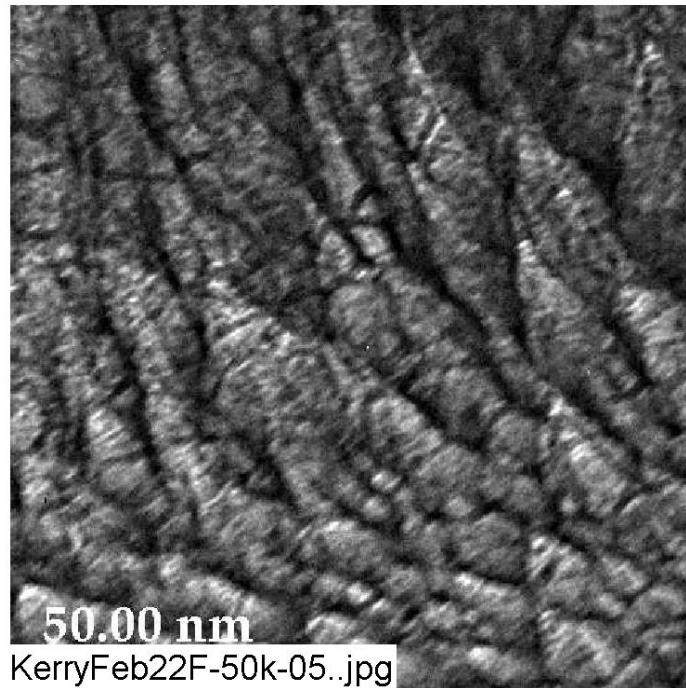


Figure F2-23. Electron micrograph magnified 50,000 times for a fifth Test-2 Day-17 filtered sample location (KerryFeb22F-50k-05).

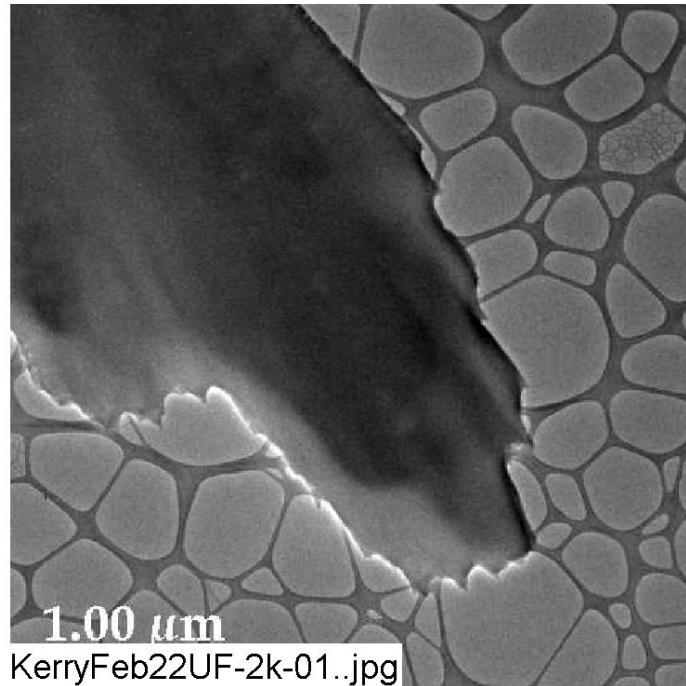


Figure F2-24. Electron micrograph magnified 2,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-01).

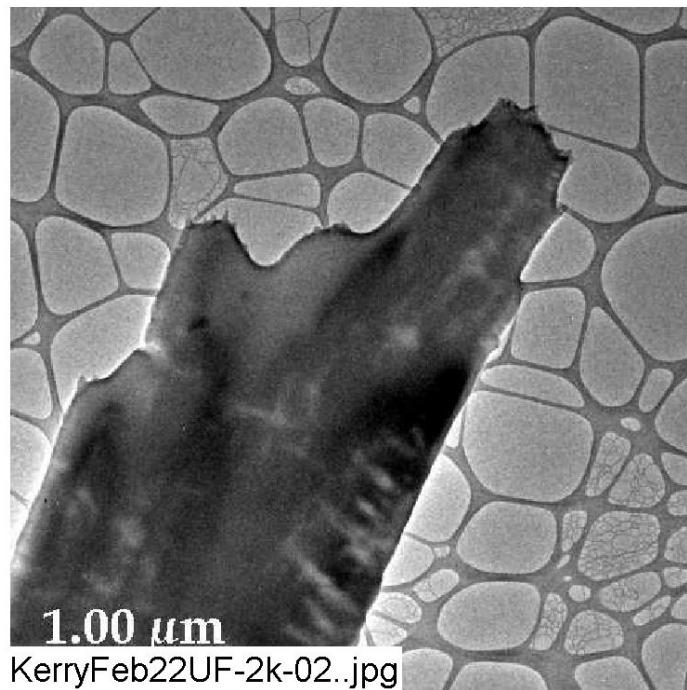


Figure F2-25. Electron micrograph magnified 2,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-02).

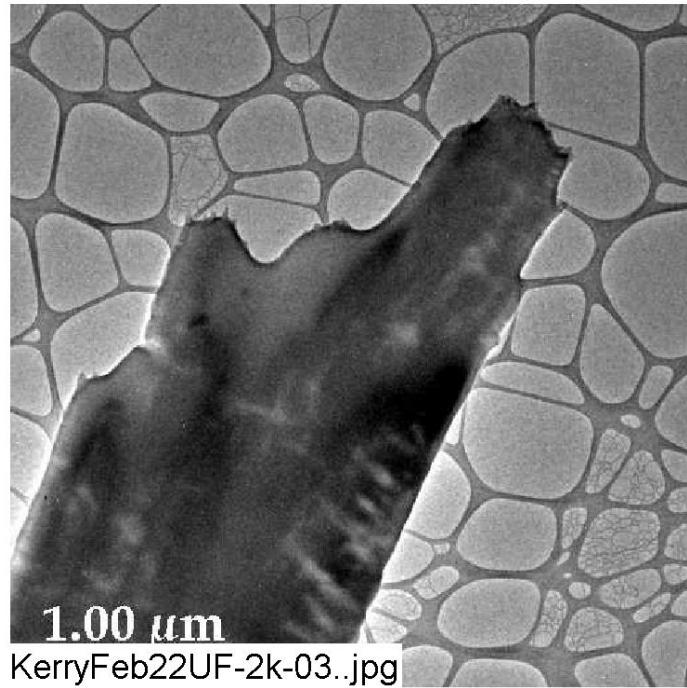


Figure F2-26. Electron micrograph magnified 2,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-03).

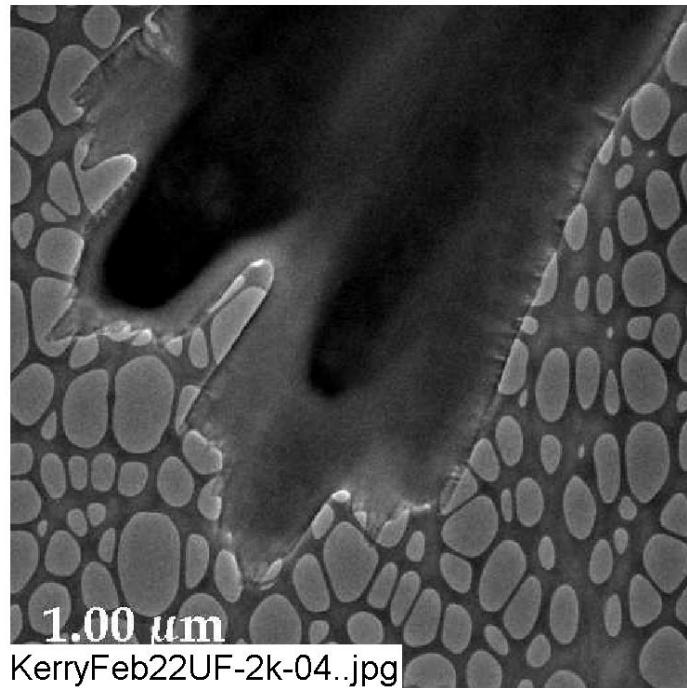


Figure F2-27. Electron micrograph magnified 2,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-2k-04).

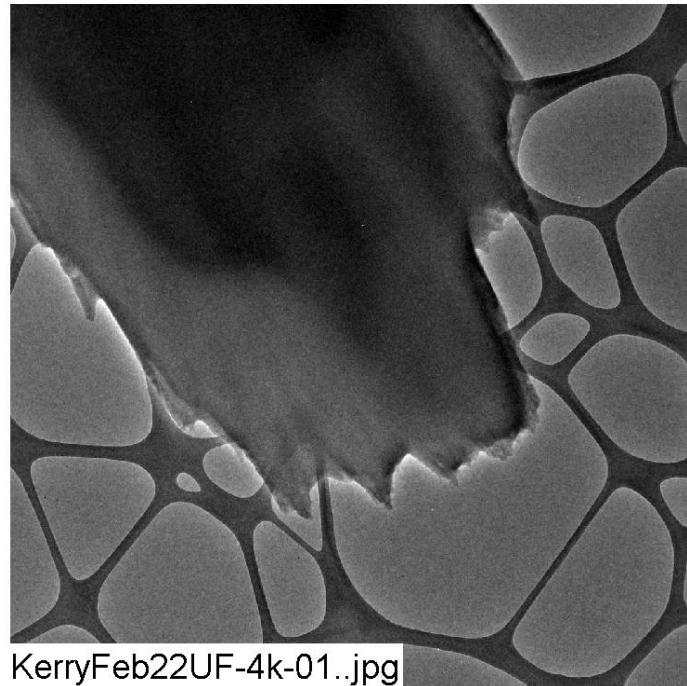


Figure F2-28. Electron micrograph magnified 4,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-01).

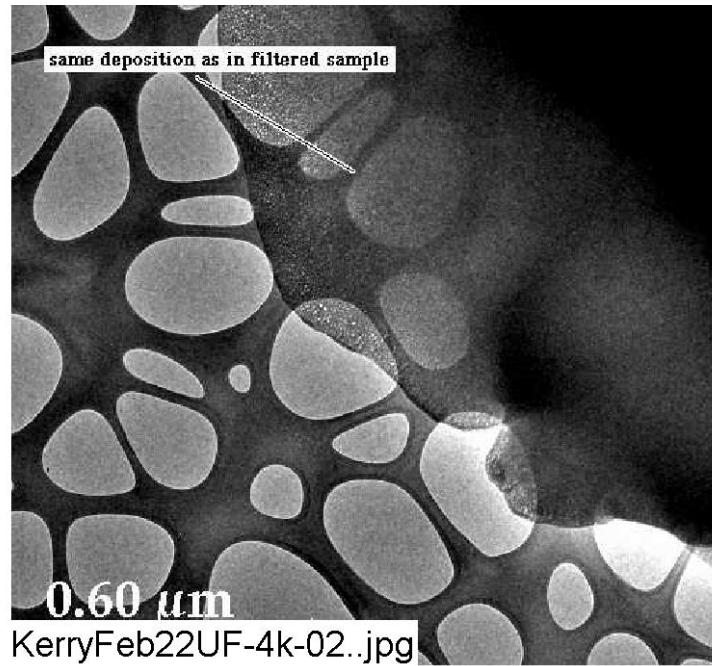


Figure F2-29. Electron micrograph magnified 4,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-02).

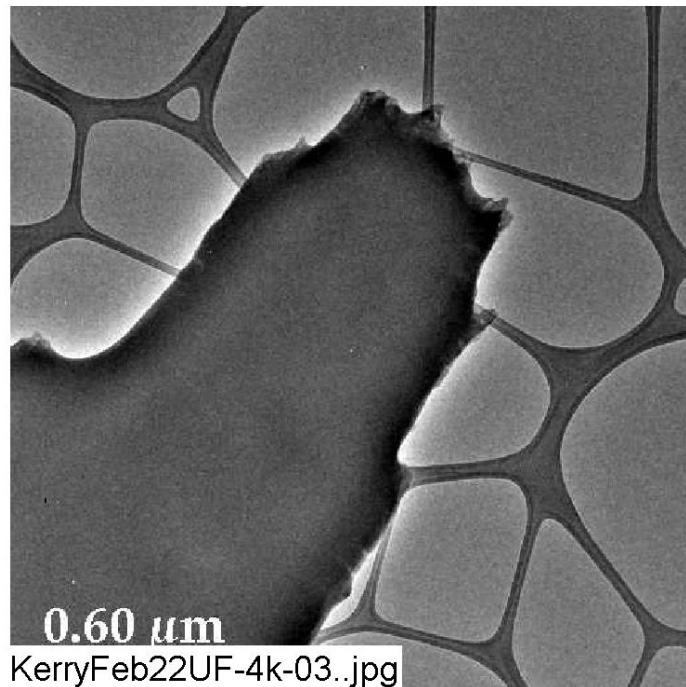


Figure F2-30. Electron micrograph magnified 4,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-03).

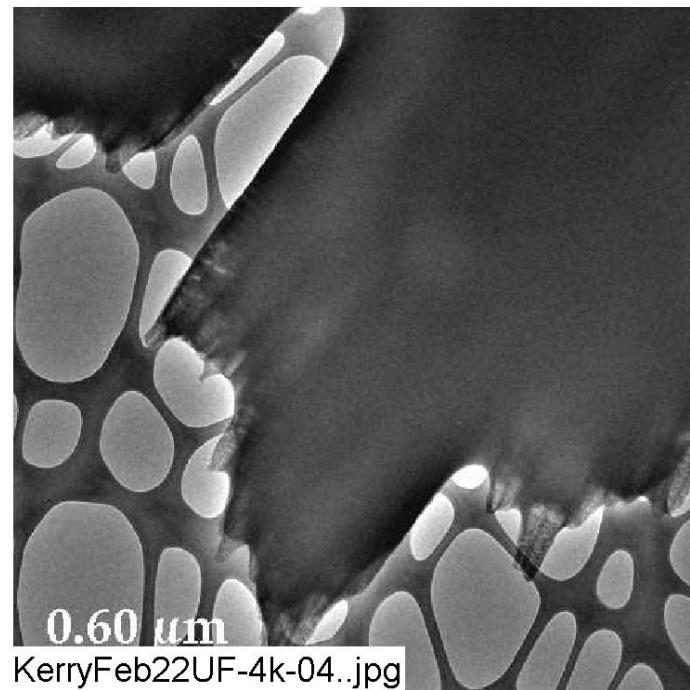


Figure F2-31. Electron micrograph magnified 4,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-4k-04).

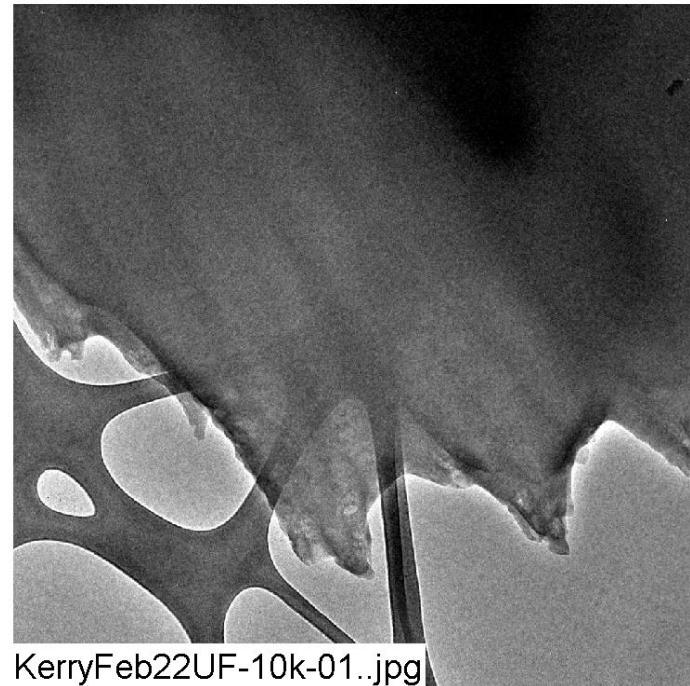


Figure F2-32. Electron micrograph magnified 10,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-01).

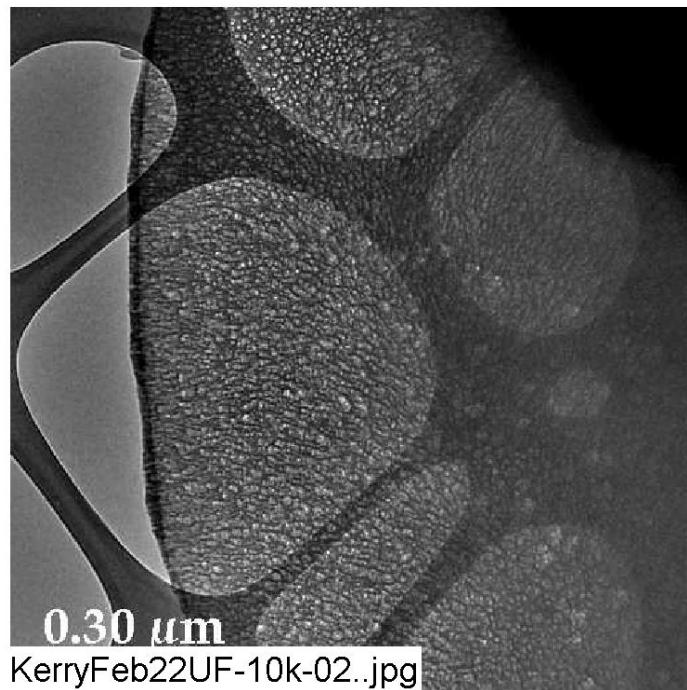


Figure F2-33. Electron micrograph magnified 10,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-02).

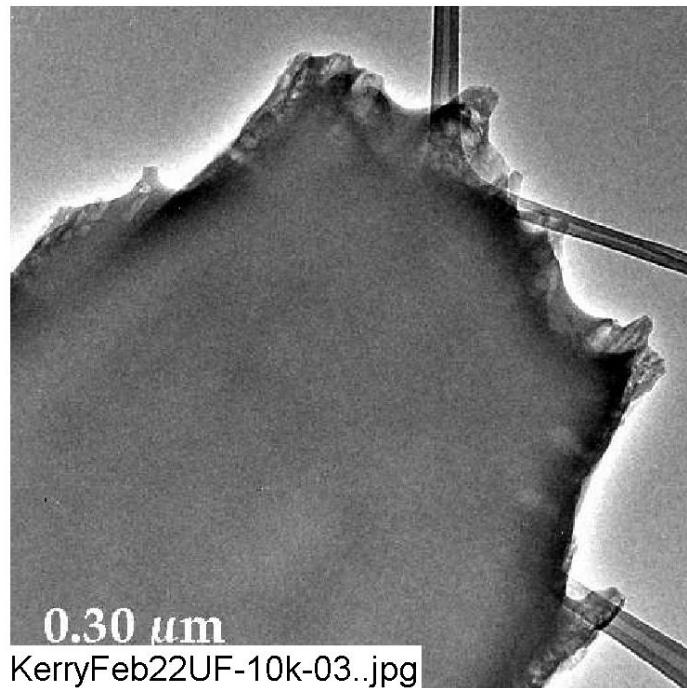


Figure F2-34. Electron micrograph magnified 10,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-03).

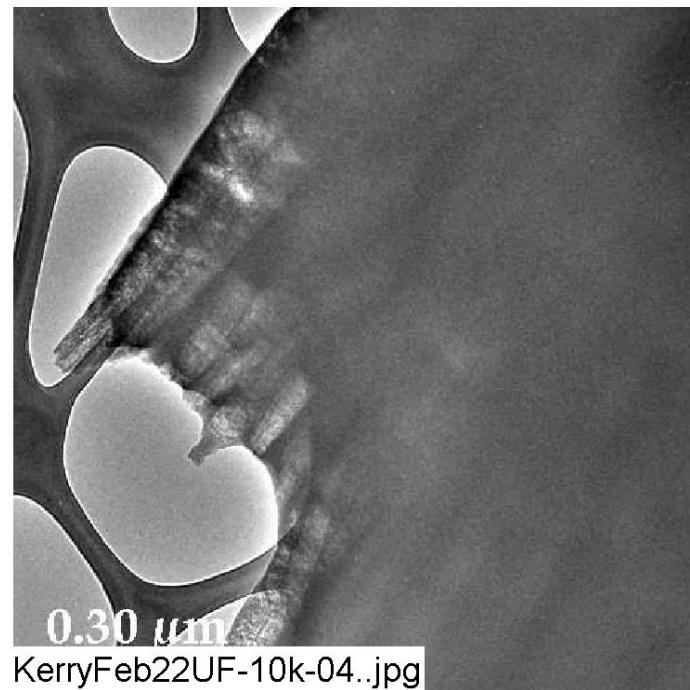


Figure F2-35. Electron micrograph magnified 10,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-10k-04).

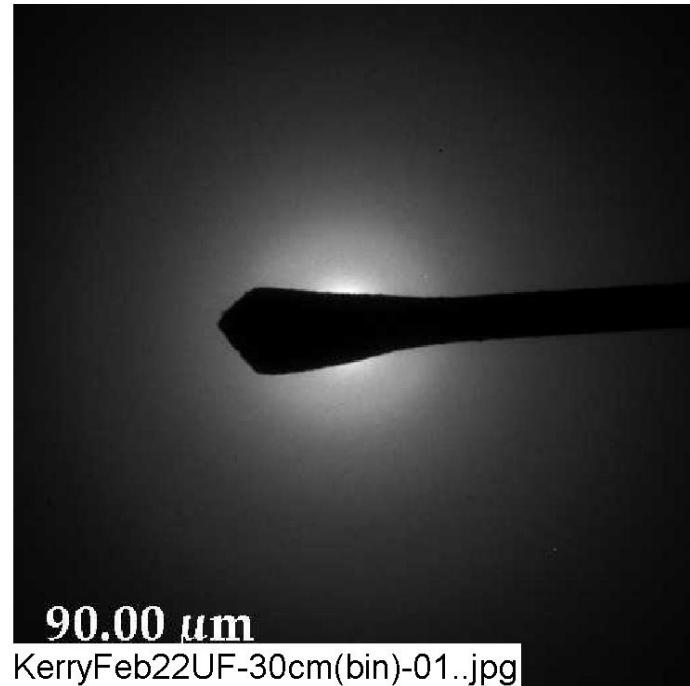
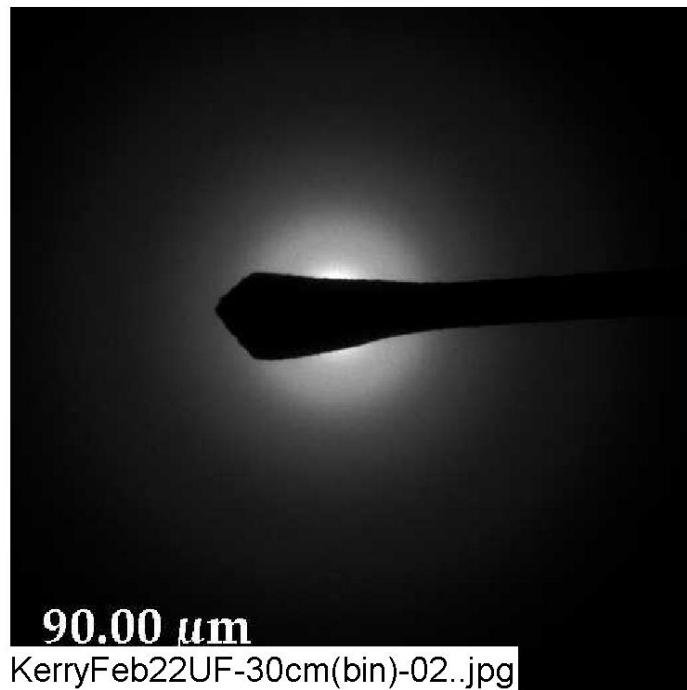


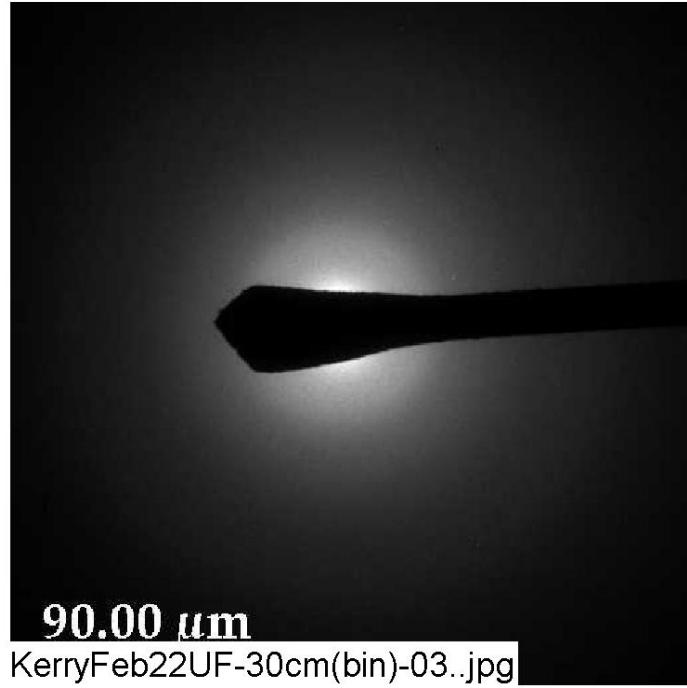
Figure F2-36. TEM image for one Test-2 Day-17 unfiltered sample solution location (KerryFeb22UF-30cm(bin)-01).



90.00 μm

KerryFeb22UF-30cm(bin)-02..jpg

Figure F2-37. TEM image for a second Test-2 Day-17 unfiltered sample solution location (KerryFeb22UF-30cm(bin)-02).



90.00 μm

KerryFeb22UF-30cm(bin)-03..jpg

Figure F2-38. TEM image for a third Test-2 Day-17 unfiltered sample solution location (KerryFeb22UF-30cm(bin)-03).

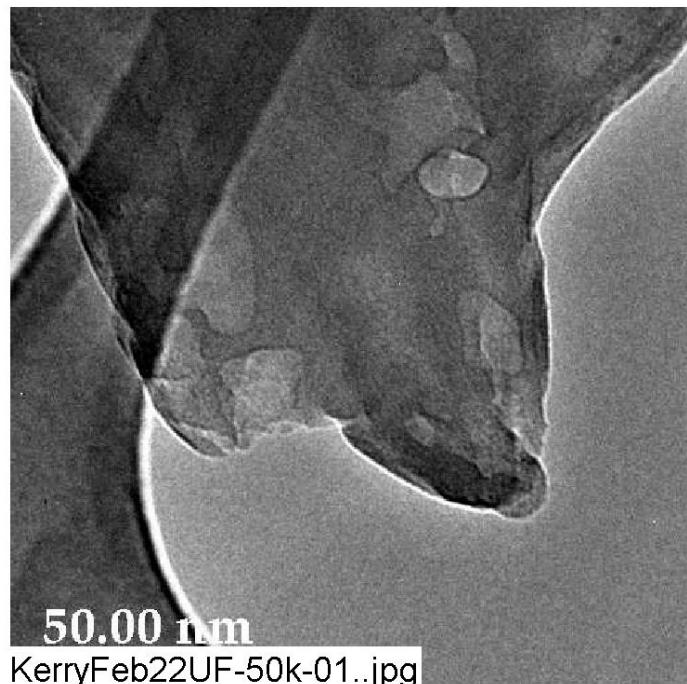


Figure F2-39. Electron micrograph magnified 50,000 times for one Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-01).

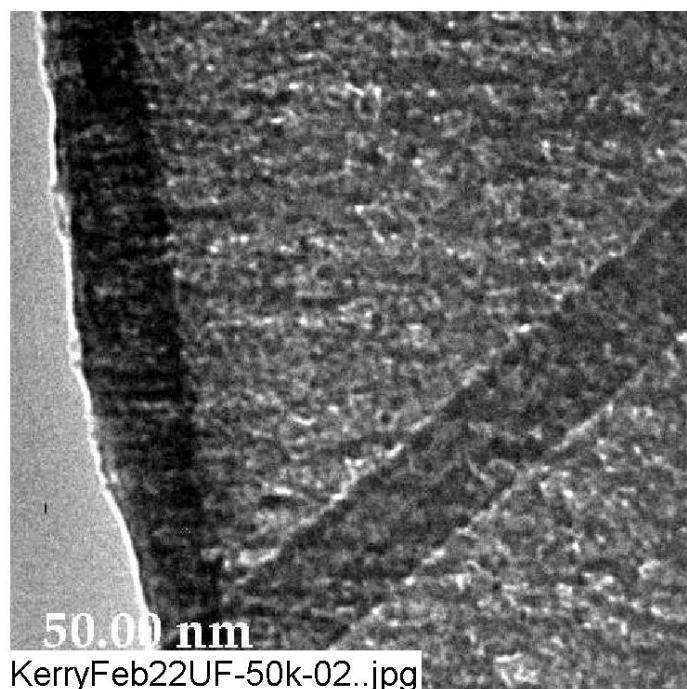


Figure F2-40. Electron micrograph magnified 50,000 times for a second Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-02).

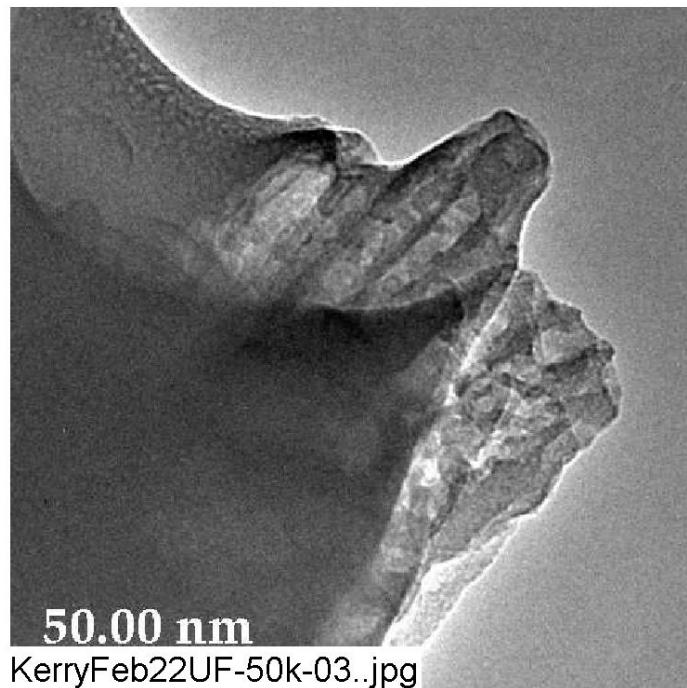


Figure F2-41. Electron micrograph magnified 50,000 times for a third Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-03).

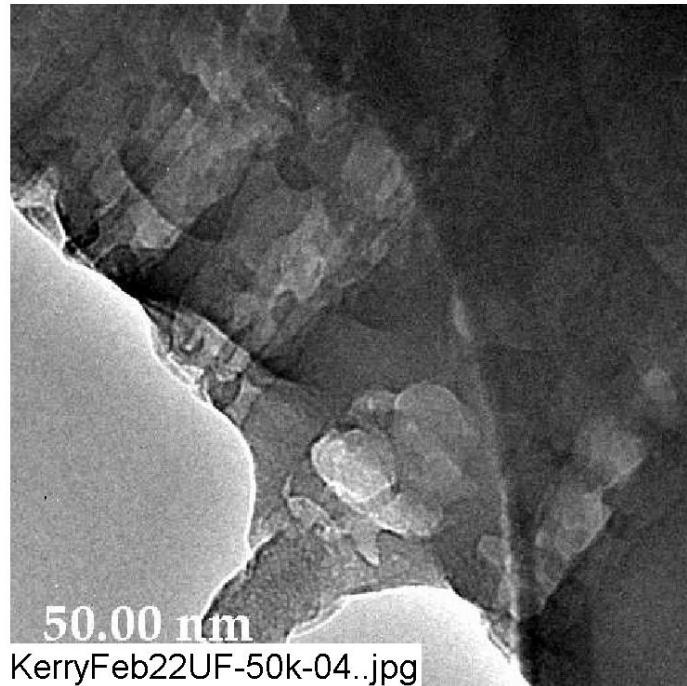


Figure F2-42. Electron micrograph magnified 50,000 times for a fourth Test-2 Day-17 unfiltered sample location (KerryFeb22UF-50k-04).